WHAT IS CLAIMED IS:

Claims

1. A method for authorizing an access to a table of address correspondence between a multitask CPU and at least one memory containing several programs, consisting of calculating, on each task change of the CPU, a signature of at least part of the program instruction lines, and checking the conformity of this signature with a signature recorded upon previous execution of the involved program, each signature being associated with a program identifier.

2. The method of claim 1, wherein said signature is calculated by the implementation of a Hash function.

3. The method of claim 1, wherein said memory is a RAM in which are loaded program lines from a mass storage.

4. A processor of multitask execution of several programs, exploiting a table of correspondence between virtual addresses of the lines of the different programs and physical addresses of these lines in at least one memory, each correspondence being associated with an identifier of the involved program, comprising means for calculating a current signature based on at least part of the program lines in said memory, and means for comparing this signature with the identifier of the program stored in the correspondence table.

5. The processor of claim 4, wherein the identity of the signature and of the program identifier allows the CPU to execute the instruction of the involved program.

6. A method of executing an instruction, comprising:

generating at a first time a first data set corresponding to a portion of the instruction;

determining if the first data set has a predetermined relationship to a second data set; and

authorizing execution of the instruction if the first data set has the predetermined relationship to the second data set.

7. The method of claim 6 wherein the relationship comprises the first and second data sets being identical.

8. The method of claim 6 wherein the second data set corresponds to the portion of the instruction.

9. The method of claim 6, further comprising generating the second data set at a second time prior to the first time.

10. The method of claim 6, further comprising executing the instruction at a second time prior to the first time.

11. The method of claim 6 wherein generating comprises reading the portion from mass storage.

12. An apparatus for authorizing execution of an instruction, comprising:

a generator operable to generate a first data set corresponding to a portion of the instruction; and

an analyzer operable to determine if the first data set has a predetermined authorizing relationship to a second data set, the analyzer further operable to authorize execution of the instruction if the first data set has the predetermined relationship to the second data set.

13. The apparatus of claim 12 wherein the analyzer is further operable to generate an authorizing signal if the first data set has the relationship.

14. An electronic system comprising:

an apparatus for authorizing execution of an instruction, comprising:

a generator operable to generate a first data set corresponding to a portion of the instruction; and

an analyzer operable to determine if the first data set has a predetermined authorizing relationship to a second data set.

15. An article of manufacture, comprising:

a machine-readable medium having instructions stored thereon to:

generate at a first time a first data set corresponding to a portion of an instruction;

determine if the first data set has a predetermined relationship to a second data set; and

authorize execution of the instruction if the first data set has the relationship.

16. An apparatus, comprising:

means for generating at a first time a first data set corresponding to a portion of an instruction;

means for determining if the first data set has a predetermined relationship to a second data set; and

means for authorizing execution of the instruction if the first data set has the predetermined relationship.

17. An apparatus for executing an instruction, comprising:

a generator operable to generate a first data set corresponding to a portion of the instruction;

an analyzer operable to determine if the first data set has a predetermined authorizing relationship to a second data set; and

a processor operable to execute the instruction if the first data set has the predetermined relationship to the second data set.